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# NOTICE OF ALLOWANCE AND FEE(S) DUE

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12/31/2008

SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 EXAMINER
PHAM, TUAN
ART UNIT PAPER NUMBER

2618 DATE MAILED: 12/31/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,855	11/26/2003	Mohamad Essabar	1899.007US1	9679

TITLE OF INVENTION: RESONANCE FREQUENCY SHIFT CANCELING IN WIRELESS HEARING AIDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/31/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further of indicated unless corrected maintenance fee notificated to the control of the contro	correspondence includir d below or directed oth	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of rand) specifying a new corres	naintenance fees we epondence address;	ill be and/or	mailed to the current (b) indicating a separate	correspondence address as arate "FEE ADDRESS" for
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							(Depositor's name)
			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO:	RNEY DOCKET NO.	CONFIRMATION NO.
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nonprovisional	NO	\$1510	\$300	<b>\$</b> 0		\$1810	03/31/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
PHAM,		2618	455-078000				_
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unle recordation as set forth (A) NAME OF ASSIC	ess an assignee is ident n in 37 CFR 3.11. Comp GNEE	ified below, no assignee oletion of this form is NO	I' a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assigno assignment. and STATE OR C	OUNT	RY)	ocument has been filed for
Please check the appropri	ate assignee category or	categories (will not be pr	inted on the patent):	Individual 🖵 Co	rporati	on or other private gro	oup entity  Government
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NOTE: The Issue Fee and	d Publication Fee (if requ		d from anyone other than t				ne assignee or other party in
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SCHWEGMAN, LUNDBERG & WOESSNER, P.A.		РНАМ,	TUAN		
P.O. BOX 2938			ART UNIT	PAPER NUMBER	
MINNEAPOLIS, MN 55402			2618		
		DATE MAILED: 12/31/2008			

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1160 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1160 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)
	10/723,855	ESSABAR, MOHAMAD
Notice of Allowability	Examiner	Art Unit
	THAN A DHAM	2619
	TUAN A. PHAM	2618
The MAILING DATE of this communication appeared all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	in this application. If not included nunication will be mailed in due course. <b>THIS</b>
1. 🔀 This communication is responsive to Amendment filed on	<u>07/18/2008</u> .	
2. The allowed claim(s) is/are 2-20 and 22-31.		
<ul><li>3. ☐ Acknowledgment is made of a claim for foreign priority unallocation.</li><li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li></ul>	nder 35 U.S.C. § 119(a)-(d	or (f).
<ol> <li>Certified copies of the priority documents have</li> </ol>	e been received.	
2. Certified copies of the priority documents have	e been received in Applicat	ion No
3. Copies of the certified copies of the priority do	cuments have been receive	ed in this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		le a reply complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which give		
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftspers		ew ( PTO-948) attached
1)  hereto or 2) to Paper No./Mail Date	-	,
(b) ☐ including changes required by the attached Examiner		or in the Office action of
Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t		
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 ☐ Notice of I	nformal Patent Application
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		Summary (PTO-413),
2 Notice of Dialiperson's Faterit Diawling Neview (F10-940)	Paper No	./Mail Date
3. Information Disclosure Statements (PTO/SB/08),	7. 🛛 Examiner'	s Amendment/Comment
Paper No./Mail Date  4.	8. 🛭 Examiner'	s Statement of Reasons for Allowance
2.5.5g.55	9. 🔲 Other	<u></u> .
/TUAN A PHAM/		
Primary Examiner, Art Unit 2618		

Application/Control Number: 10/723,855 Page 2

Art Unit: 2618

### **DETAILED ACTION**

#### **EXAMINER'S AMENDMENT**

- 1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 2. Authorization for this examiner's amendment was given in a telephone interview with Attorney of record Marvin L. Beekman on 12/16/2008.
- 3. The application has been amended as follows:

#### Claim 2 has been changed as follows:

--2. A communication system, comprising:

an antenna with a resonant circuit, the resonant circuit including an inductive coil connected to a tuning capacitor;

means to selectively drive the resonant circuit during a transmit mode;

means to selectively receive an induced signal in the resonant circuit during a receive mode; and

means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are

Art Unit: 2618

approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively exclude a predetermined parallel capacitance with respect to the tuning capacitor when switching from the receive mode to the transmit mode, and to selectively include the predetermined parallel capacitance with respect to the tuning capacitor when switching from the transmit mode to the receive mode. --

### Claim 3 has been changed as follows:

--3. A communication system, comprising:

an antenna with a resonant circuit, the resonant circuit including an inductive coil connected to a tuning capacitor;

means to selectively drive the resonant circuit during a transmit mode;

means to selectively receive an induced signal in the resonant circuit during a receive mode; and

means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively include a predetermined series capacitance with respect to the tuning capacitor when switching from the receive mode to the transmit mode, and to selectively exclude the

Application/Control Number: 10/723,855 Page 4

Art Unit: 2618

predetermined series capacitance with respect to the tuning capacitor when switching from the transmit mode to the receive mode. --

# Claim 4 has been changed as follows:

--4. A communication system, comprising:

an antenna with a resonant circuit, the resonant circuit including an inductive coil connected to a tuning capacitor;

means to selectively drive the resonant circuit during a transmit mode;

means to selectively receive an induced signal in the resonant circuit during a receive mode; and

means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively exclude a predetermined inductance from the resonant circuit of the antenna when switching from the receive mode to the transmit mode, and to selectively include the predetermined inductance from the resonant circuit of the antenna when switching from the transmit mode to the receive mode. --

Application/Control Number: 10/723,855 Page 5

Art Unit: 2618

Claims 1 and 21 has been changed as follows:

Claims 1 and 21 are cancelled.

Claim 27 has been changed as follows:

In claim 27, line 1, after "claim", replace "1" with -- 2 --.

(END of AMENDMENT)

**REASONS FOR ALLOWANCE** 

4. Claims 2-20 and 22-31 are allowed over the prior art of record.

5. The following is an examiner's statement of reasons for allowance:

The applicant's Remarks, filed on 07/18/2008, have been carefully reviewed with update search. Consequently, reasons for allowance of claims 5-20, 22-26, and 28-29 are set forth in according to the applicant's remarks stated on pages 15-16.

Regarding claim 2, the prior art made of record fails to clearly teach or fairly suggest the features of means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively exclude a predetermined parallel capacitance with respect to the tuning

Art Unit: 2618

capacitor when switching from the receive mode to the transmit mode, and to selectively include the predetermined parallel capacitance with respect to the tuning capacitor when switching from the transmit mode to the receive mode, in combination with other limitations, as specified in the independent claim 2, and further limitations of their respective dependent claims 27.

Regarding claim 3, the prior art made of record fails to clearly teach or fairly suggest the features of means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively include a predetermined series capacitance with respect to the tuning capacitor when switching from the receive mode to the transmit mode, and to selectively exclude the predetermined series capacitance with respect to the tuning capacitor when switching from the transmit mode to the receive mode, in combination with other limitations, as specified in the independent claim 3.

Regarding claim 4, the prior art made of record fails to clearly teach or fairly suggest the features of means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant

Art Unit: 2618

circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively exclude a predetermined inductance from the resonant circuit of the antenna when switching from the receive mode to the transmit mode, and to selectively include the predetermined inductance from the resonant circuit of the antenna when switching from the transmit mode to the receive mode, in combination with other limitations, as specified in the independent claim 4.

Regarding claim 30, the prior art made of record fails to clearly teach or fairly suggest the features of means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal, wherein the means to selectively include a frequency shift canceling component in the resonant circuit includes means to selectively exclude a predetermined inductance from the resonant circuit of the antenna when switching from the receive mode to the transmit mode, and to selectively include the predetermined inductance from the resonant circuit of the antenna when switching from the transmit mode to the receive mode, in combination with other limitations, as

specified in the independent claim 30, and further limitations of their respective dependent claims 31.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Applications Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TUAN A PHAM/

Primary Examiner, Art Unit 2618

Application/Control Number: 10/723,855

Page 9

Art Unit: 2618